

CLAIMS:

1. An arrangement (1) for generating a pull-down switch-off signal for a video compression encoder, which signal is determined by the arrangement (1) in dependence on a converted signal which is produced from an NTSC signal by means of an inverse 3:2 pull-down conversion,
- 5 wherein the circuit arrangement includes a Mean Absolute Distortion detector (2) and a circuit (3) for determining Hadamard coefficients,
- wherein the MAD detector (2) produces a MAD signal which indicates for each block of predefined size the difference between the picture contents of two consecutive frames,
- 10 wherein the circuit (3) for determining the Hadamard coefficients delivers two coefficients in blocks per frame, from which coefficients a first coefficient indicates the sum of the differences of the pixels of adjacent scanning lines i and $i+1$ and a second coefficient indicates the sum of the differences of the pixels of scanning lines i and $i+2$,
- and wherein the pull-down switch-off signal is generated in dependence on the
- 15 values of the MAD signal summed for all the blocks of a frame and in dependence on the two Hadamard coefficients summed for all the blocks of a frame.
2. An arrangement as claimed in claim 1, characterized in that the pull-down switch-off signal
- 20 - signals a switching off when the MAD value summed for each frame exceeds a predefined threshold, and/or
- signals a switching off when the quotient from the first Hadamard coefficient summed frame-by-frame and the second Hadamard coefficient summed frame-by-frame at one or more predefinable positions within a predefinable number of pull-
- 25 down four-cycles of the converted signal exceeds a predefinable threshold.

3. An arrangement as claimed in claim 2, characterized in that the pull-down switch-off signal signals a switching off of the inverse 3:2 pull-down conversion when at at least one predefinable position within a predefinable number of pull-down four-cycles of the converted signal the value of the quotients of the assigned Hadamard coefficients lies a
5 predefinable value above or below the average of the summed quotients of the Hadamard coefficients of all the positions of this pull-down four-cycle.
4. An arrangement as claimed in claim 3, characterized in that the pull-down switch-off signal signals a switching off of the inverse 3:2 pull-down conversion when at one
10 of the positions one, two or three within three consecutive cycles of the converted signal the value of the summed quotients of the assigned Hadamard coefficients lies about 10% above or below the average of the quotients of the Hadamard coefficients of all the position of this pull-down four-cycle, wherein the position two within one cycle of the converted signal represents the position whose converted frame was recovered from two different frames of
15 the unconverted signal.
5. An arrangement as claimed in claim 1, characterized in that the pull-down switching signal signals a switching off of the inverse 3:2 pull-down conversion if the MAD signal summed frame-by-frame exceeds three times the average value from the MAD values
20 of a predefinable number of previous frames.
6. An arrangement as claimed in claim 1, characterized in that the MAD detector (2) and the circuit (3) for determining the Hadamard coefficients are provided in common for the arrangement and for an MPEG encoder for which the pull-down switch-off signal is
25 provided.
7. An arrangement as claimed in claim 1, characterized in that the pull-down switch-off signal is provided for an MPEG2 or MPEG4 encoder.
- 30 8. Use of the arrangement as claimed in one of the claims 1 to 7 in a DVD recorder.